LTPP Environmental Issues

RESPONSE TO "HOMEWORK QUESTIONS"

The Large-scale Solar Association and the California Wind Energy Association appreciate this opportunity to submit thier responses to the "homework questions," and very much appreciate the intentions of this effort. There is certainly a role, and indeed a responsibility, for the CPUC to seek to minimize the environmental harms and maximize the environmental benefits of energy procurement. At the same time, the CPUC is not a generation siting agency, nor in this hybrid market structure within the control area of an Independent System Operator are the Investor-Owned Utilities ("IOUs") properly charged with *planning* where generation will be built, or of what type, or for that matter what the cumulative environmental impact may be of such development, either at large or in any specific geographical area. Rather, the relative preferences for what the IOUs plan to *procure* is the proper scope of inquiry, i.e., how the Commission's loading order will be implemented consistent with reliability needs and least cost procurement principles, while attaining, at a minimum, RPS and GHG requirements.

- How should environmental issues be addressed in the LTPP?

  The LTPP should explain the *processes* that the IOUs plan to use to procure resources that will, in sum, implement the CPUC's loading order and achieve RPS and GHG requirements. In this hybrid market structure, these processes largely translate to RFOs. For RFOs to be effective, as market mechanisms they must have sufficient liquidity to ensure market pricing and oid market power. As discussed below, environmental and other criteria are appropriate for consideration in selecting the best offers within an RFO, but subdividing the market into highly specialized RFOs is not a tenable approach. Unless we are returning to a vertically integrated market, it is simply not realistic to have IOUs plan where or what generation development will occur in any meaningful way, other than to provide for the characteristics needed for reliability (note that when such needs become location-specific, RFOs have often ceased to become effective, requiring the use of Reliability Must-Run contracts or CAISO centralized procurement).

- How should environmental issues be addressed in RFOs?

  The RPS RFOs contain least-cost, best-fit and other selection criteria that are intended to ensure that the resources are feasible (including environmental permitting feasibility), can be integrated into the grid reliably, and meet other environmental criteria, such as environmental justice. It would be appropriate for the IOUs to provide, through their LTPPs, how their combined RFOs and other procurement programs will attain the Commission's loading order, as well as permitting and reliability feasibility. It may also be appropriate for the IOUs to consider, for conventional generation, the relative emissions profiles of the bids they receive and to select those bids that represent the most optimal blend of economic and envir ntal concerns, although determining how these factors would interact would be a difficult task. Environmental impacts of development (as opposed to operations), particularly for renewable technologies, are highly specific to the precise site and technology, and generally require lengthy and careful study; high-level environmental assumptions cannot responsibly discriminate between individual bids that pass preliminary feasibility screens, even if those bids are of differe ologies.

- What level of geographic specificity should be included at the LTPP level?

  Geographic specificity, other than the locational needs of the grid for purposes of reliability, are not appropriate for LTPP-level analyses. The LTPP cannot and should not attempt to replicate or supplant the Transmission Planning Process, which determines, in conj with other CAISO and PTO studies, the reliability needs of the grid; nor can it or should it seek to become a development siting process and replace programmatic or site-specific CEQA and/or NEPA processes. The LTPP is fundamentally a *procurement* plan, and other than as absolutely necessary- i.e., for reliability in location-constrained areas, procurement must not be planned as a location-specific exercise.

- What level of geographic specificity should be included at the RFO level?

  Only the geographic specificity needed to assure local reliability, as discussed above.

- How can we ensure that fossil plants (and fossil retirements) are considered with the same scrutiny as green resource options?

  As discussed above, the LTPP should comprehensively plan its RFOs to implement the loading order. Within RFOs for conventional power, emissions characteristics could be considered as selection criteria, as discussed above.

- Should the RETI environmental screening effort be leveraged and if it should, how should it be leveraged?

  No. The RETI environmental criteria were designed, within a short time frame, to serve a single purpose: to provide a basis for comparing Competitive Renewable Energy Zones for purposes of guiding transmission priorities. They are intended to provide high-level indicators of the *relative, not absolute*, likelihood that overall development within zones might pose environmental concerns. The criteria do not necessarily have any bearing on the environmental impacts that may be associated with any particular project, regardless of the environmental ranking of the zone that the project may be located within; it is quite possible that a given project in a well-ranked zone may be much less environmentally preferable than a project in a poorly-ranked zone. The criteria were not intended to guide procurement, and do not have much meaning for the site-specific procurement that occurs within RPS RFOs. The RPS RFOs already use transmission ranking information that is far more precise and relevant to RPS procurement than the indirect value of environmental ratings, which will influence major renewable transmission prio zation and thus the time at which some – but far from all-- of the transmission will come into service that renewables will depend upon. The RETI environmental screening should be leveraged to achieve its intended purpose: i.e., to expedite the major transmission needed to access renewable resource areas in an environmentally-responsible fashion. This screening is not suitable to provide LTPP-level criteria, as IOUs do not and should not preferentially prefer resources because of the zones in which those resources happen to exist; if IOUs were to procure resources based on zone, rather than the bid characteristics — including the permitting and reliability feasibility already considered in the RPS RFO process as well as cost and value — the result may increased, rather than decreased environmental impact.

- Actual environmental impacts, as RETI's reports have explicitly recognized, can be assessed only after on-the-ground assessments are performed at each site for the particular technology being proposed. Typically, this requires one to three years of study under the oversight of the jurisdictional agency(ies) at each site, each costing at least several hundred thousand dollars. No prediction of the outcomes of these studies would be environmentally acceptable or sound, and it would be highly inappropriate and inefficient for the LTPP to attempt to undertake such broad predictions or to incorporate the results of such processes. . What are the potential benefits of introducing environmental analysis to the LTPP process?

Planning for increased incorporation of the loading order within the suite of RFOs to be held by each IOU would be beneficial at the LTPP stage, potentially including minimum and aspirational goals.

- Can environmental analysis at the LTPP stage help to refine the environmental issues addressed in the RFO stage?

  RPS and other specific RFOs and procurement processes are closely regulated by specialized proceedings that govern their respective selection criteria. The criteria applicable to each procurement mechanism have been carefully reviewed, balanced and honed through multiple regulatory proceedings; any change to those criteria must be made in context, and within those proceedings. The LTPP stage would, on the other hand, be an appropriate venue for providingenvironmental criteria, such as permitting feasibility and preferences for improved emissions profiles, for conventional RFOs.

- How can environmental analysis at the LTPP stage be used to establish need determination for longer term (beyond five-year) resource procurement?

  Environmental analysis could inform retirement rate likelihood based on phased emissions objectives from conventional resources, which in turn would inform resultant replacement generation needs.